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Pollution Report

United States Environmental Protection Agency

I. HEADING

DATE: December 21, 1999

SUBJECT: Pollution Report for the Allied Signal Chemical Fire Emergency Response, Detroit, Wayne County, Michigan

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POLREP NO. 1 Initial (see photograph attachments - photo 1, photo 2, and photo 3)

II. BACKGROUND

Site Number	Pending	Response Authority	CERCLA
CERCLIS ID Number	N/A	NPL Status	Not on NPL
MDEQ Notification	Yes	Latitude/Longitude	42° 17' 28.0"N/83° 06' 38.9"W
Start Date	December 17, 1999	Completion Date	N/A

III. SITE INFORMATION

A. Incident Category

Emergency Response (CERCLA)

B. Site Description

1. Site Location

The Allied Signal Inc. facility is located at 1200 Zug Island Road, Detroit, Wayne County, Michigan (See photo 1). The site is bordered to the north by Zug Island Road and railroad tracks, to the west by railroad tracks, and to the south and east by the Rouge River. A cement containment dike separates the facility property from the bank of the Rouge River.

2. Description of Threat

On December 17, 1999, at approximately 1800 hours, a 79,000 gallon process tank containing heated coal tar pitch exploded, spewing coal tar in the southwest direction from the tank, coating the maintenance building, and several storage tanks on site (See photo 2). The coal tar ignited when it contacted a furnace located next to the tank, causing the furnace and maintenance building to catch on fire. The City of Detroit Fire Department (DFD) and the Detroit Police Department were notified and responded immediately. The fire at the maintenance building was put out within five minutes of the arrival of the DFD, while the furnace burned for approximately 45 minutes.

C. Preliminary Assessment/Site Inspection Results

On December 17, 1999, at approximately 2100 hours, U.S. EPA and the Superfund Technical Assessment and Response Team (START) began mobilization to the site to assess the situation. When the U.S. EPA arrived at the scene, the fire was still burning. The U.S. EPA assisted the DFD and fire marshal with chemical identification and air monitoring support. The U.S. EPA/START evaluated the situation on site. Coal tar covered several tanks, two buildings, two railroad tank cars, and the ground in the area surrounding the explosion (See photo 3). Coal tar was found within a drainage trench located approximately ten feet south of the tank that exploded. The trench runs into an on-site wastewater treatment system which Allied Signal Inc shutdown to prevent any contaminants from entering the river. The U.S. EPA coordinated with Allied Signal, Inc. to begin cleanup of the coal tar spill. Due to the chemical nature of coal tar which contains benzene, naphthalene, and polynuclear aromatic hydrocarbons; START began air monitoring for volatile organic compounds (VOCs) with a flame ionization detector (FID) and a photo ionization detector (PID). Results from air monitoring conducted within the breathing zone on site were at background levels, with brief elevations in VOC concentrations lasting for less than five seconds per episode. Concentrations of VOCs ranging from four to five units were detected from the coal tar that coated the tanks on site. In conjunction with the air monitoring conducted with the FID and PID, Draeger tubes were used to test the air for the presence of benzene. Concentrations of benzene were not detected with the Draeger tubes.

IV. RESPONSE INFORMATION

A. Current Situation:

Approximately 90 percent of the ground surface cleanup of coal tar has been completed. Allied Signal Inc.'s contractor Marine Pollution Control (MPC) continues cleanup efforts.

B. Actions Taken: December 17 through 20, 1999

On December 17, 1999, at approximately 1800 hours an explosion occurred in aboveground storage tank #57 spewing molten coal tar out of the top of the tank. The molten coal tar caught on fire when coal tar vapors came into contact with a furnace located next to tank #57, causing the furnace and the maintenance building to catch on fire. The DFD was notified immediately and responded within minutes. The DFD extinguished the fire and relinquished control of the site back to Allied Signal, Inc. Allied Signal Inc. contacted their cleanup contractor (MPC), who mobilized a crew to site to commence removal of the coal tar that coated the ground surfaces of the site. The MPC crew worked the entire night removing coal tar with a jackhammer/scrapper and a Bobcat uni-loader, and was relieved by a second crew at 0800 hours December 18, 1999.

On December 17, 1999, at approximately 1900 hours, the U.S. Coast Guard MSO - Detroit, arrived at the scene to investigate potential run-off into the Detroit River. No evidence of river contamination was observed as a result of the fire.

From December 18, through December 20, 1999, MPC continued coal tar cleanup efforts of the ground surfaces. MPC worked from 0800 to 1700 hours each day chipping the coal tar from the ground surfaces of the site. Sand was deposited around tank #57 to absorb oil on the ground. The sand is to be placed in a rolloff box along with the coal tar material that has been scraped from the ground and disposed off site.

C. Next Steps:

Allied Signal Inc. is awaiting bids to remove the coal tar from the drainage trench system, and will commence cleanup of the tank and building surfaces at a later date.

D. Key Issues:

OSC Grunert has scheduled a follow-up meeting with OSC Karla Auker to review previous FRP inspection conducted six months ago at Allied Signal, Inc.

V. **COST INFORMATION**

U.S. EPA costs = \$600.00

START costs = \$1,687.50

VI. **DISPOSITION OF WASTES**

No waste has been disposed at this time.